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Conference Abstract

DiSSCo Flanders: A regional natural science collections management infrastructure in an international context

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Abstract

DiSSCo Flanders aims at developing a standardised natural science collections management infrastructure, ensuring proper long-term conservation, and future re-usage of the collections. Meise Botanic Garden coordinates the Flemish consortium. This four-year project, funded by the FWO (Research Foundation – Flanders), started in January 2021.

The consortium brings together both the more classical 'museum' collections (Meise Botanic Garden, Ghent University Museum), with research collections (Research Institute for Nature and Forest, Flanders Research Institute for Agriculture, Fisheries and Food,

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Flanders Marine Institute, universities), and living collections (Belgian Association of Botanic Gardens and Arboreta, Zoo of Antwerp (Poo 2022)). Many of the research collections are smaller orphan collections, lacking a (full-time) curator, for which collection management is not the core business of the hosting institute. The Belgian federal DiSSCo members are associated with the project, allowing close collaboration between European, national and regional (digital) collection management inititatives.

Building on the expertise of the European DiSSCo-related projects, an initial high-level inventory and assessment of the collections has been made and will provide a better understanding of the collections landscape in Flanders (Van Baelen 2022). This step in the digitization will increase the findability of the diverse regional collections and highlight the available knowledge to the research community. Close collaboration with the TDWG Collections Descriptions interest group and the development of the Latimer Core standard (Woodburn 2021) will ensure maximal interoperability of the collection data.

In order to be relevant for research, the Flemish collections need to be more interconnected and linked to other data sources. To ensure that collection data is adhering to the FAIR principles (Findable, Accessible, Interoperable and Resuable) and ready to connect to the DiSSCo research infrastructure, DiSSCo Flanders will have a large focus on the collection(s) management system (CMS). Depending on the needs and specificities of each collection, a strategy will be chosen to implement and/or collection data will be migrated to (an) optimised system(s).

Parallel to the digital inventory and CMS choice, the consortium addresses specific themes in the format of working groups. Most of the institutes have identified that their molecular collection (DNA, tissues) has not been properly acknowledged as a separate long-term collection. Challenges such as the storage and curation of e-DNA and environmental samples (e.g., soil) have been identified.

Very often it will only be feasible to add basic data in the CMS and essential data is not available to the researchers. DiSSCo Flanders invests in the enrichment of specimen data to ensure that a maximal amount of information becomes available to the community. This can be accomplished either through the use of citizen science/crowdsourcing using the DoeDat platform (Groom 2018), or by using machine learning techniques performed by the IDLab at Ghent University (Thirukokaranam Chandrasekar 2021).

Besides the technical aspects of the DiSSCo research infrastructure, the consortium is covering topics such as data publication, legal aspects of collections, standard operating procedures, etc. through knowledge sharing and active dialog.

Keywords

consortium, digitization

Presenting author

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